# Draft Minutes MAGIC Meeting November 7, 2007, 2:00-4:00 NSF, Room 1150

#### **Attendance:**

Chris Greer	NCO	greer@nitrd.gov
Keith Jackson	LBL	krjackson@lbl.gov
Carl Kesselman	ISI	carl@isi.edu
Ken Klingenstein	I2	kjk@internet2.edu
Robert Lindsey	DOE	Robert.Lindsay@science.doe.gov
Miron Livny	Un Wisc.	miron@cs.wisc.edu
Mark Luker	Educause	mluker@educause.edu
David Martin	IBM	martinde@us.ibm.com
Don Middleton	UCAR	don@ucar.edu
Grant Miller	NCO	miller@nitrd.gov
Sara Murphy	HP	sara.murphy@hp.com
Mike Nelson	IBM	mrn@us.ibm.com
Ruth Pordes	ANL	ruth@fnal.gov
Karin Remington	NIH	remingka@nigms.nih.gov
Dane Skow	ANL	skow@mcs.anl.gov
Kevin Thompson	NSF	kthompso@nsf.gov

#### **Proceedings:**

This meeting of MAGIC was chaired by Kevin Thompson of the NSF.

## **Action Items**

- 1. The next MAGIC meeting will include a report from Don Middleton
- 2. Kevin Thompson will give a report on the CyberInfrastrucutre awards at the next MAGIC meeting

# **Chris Greer**

Chris Greer introduced himself as the new Director of the National Coorination Office (NCO). He previously was in the CyberInfrastructure Division of the NSF in charge of data issues. He has joined the NCO at a time of opportunity to respond to the recommendations of the PITAC that were published in August 2007.

## Mike Nelson

Mike Nelson has left IBM to teach at Georgetown University. His new contact email is: mnelson@pobox.com

#### **Collaboratories Roundtable**

#### **CDIGS**

CDIGS had a two-year review by the NSF and received recommendations to:

- Improve their ability to capture requirements from their user communities'
- Convey user needs through prioritization of development activities
- Look at the higher process level to identify how to capture requirements and how to identify success and increase performance and robustness

CDIGS is identifying performance and architectural areas to improve performance. They held a resource management bakeoff to compare Globus to the European systems. They greatly exceeded the performance of other systems and identified internal issues affecting performance. They streamlined user paths, improved throughput and improved the user interface. Their biggest current challenge is user focused: identify the best way to collect information on what people are using and how to prioritize needs. TeraGrid supports monitoring using Globus services and portals. With increased usage, there is a need to identify how these services scale. There are privacy policies associated with usage data. Are they getting an accurate picture of what people are doing on your systems?

# **Open Grid Forum (OGF)**

Miron Livny described the OGF meeting in China. They are embarked on a quality assurance program through the Build and Test group of OGF. The Ethics project is a joint project with the Europeans on test infrastructure that has been very productive. TeraGrid and Open Science Grid are benefiting from their program. They are building capabilities in a common environment. The infrastructures are using common infrastructure building tools providing open source capabilities. They are creating interoperability.

Grid.org will be announced at SC07. It will build Grids on top of a united devices platform to promote interoperability.

David Martin discussed OGF standards activities. Grid projects are entering full production now.

## Asin Cooperation on Grids

Miron Livny spent 2.5 weeks in China visiting seven Chinese universities. He gave a presentation at Pragma. The Japanese have a history of cooperation on Grids. The Chinese are now seriously developing Grid capabilities. They are developing their own software. ChinaGrid supports large scale hardware, much like the TeraGrid. CNGrid supports collaborative Grid capabilities among Chinese universities. Since the Chinese are building a new infrastructure with new software a question is how to bridge the two different standards. The Chinese definitely are committed to developing their own capabilities and tools. Pragma is moving toward resources but not to a common interface with Europe and the US.

The Chinese are moving rapidly to IPv6 and are well ahead of us in its use. The Chinese CERNet implements IPv6 as a separate network. It supports multi-gigabit aggregate video over IPv6.

Discussion among the MAGIC members identified that we should identify opportunities to work with the Chinese on IPv6 implementation. Bill Chang, the NSF representative in China might be useful in identifying opportunities for cooperation.

**TeraGrid** 

TeraGrid is starting to see the effects of the new HPC hardware coming on-line. Usage of the new equipments is appearing in TeraGrid monitoring. TeraGrid recently doubled its previous usage record, even before the addition of the Ranger 2 machine. There is a ramp-up in usage as existing users become aware of the additional available resources. TeraGrid is also seeing new users from a wide range of application areas. Usage statistics are not generally available.

The user potal provides a common front to the user community. As the portal has increased its capabilities, it is being used by 1/3 of the user community. TeraGrid is creating a GSI/SSH compliant portal with a single sign-on capability. This is receiving wider usage.

CDIGS is developing improvements on the software cycle. Usage information is being developed on the services reports. Improvenets are being developed on scaling, reliability, and usage statistics.

# Open Science Grid

The Charm program is using the OSG for molecular dynamics calculations for the interaction of proteins with water. FermiLab is making increased use of the OSG and resources at other facilities. An end-to-end test is being developed for te LHC collaboration to demonstrate pipelines, and mereging files at tens of sites worldwide.

A security incident originated in Europe that exercised the security teams and procedures. A password was compromised and certificates were obtained. However, there was no indication that the certificates were used. The US OSG continued operation while the European OSG would have been shut down under the same circumstances.

OSG is getting more involved in the interface between network services and capabilities. They are running applications for a range of applications groups. They are looking for opportunities to work with central America. A couple of new campuses are exploring development of a common infrastructure. The software for the latest toolkit was justrelaeased with the next veriosn due early next year. The validation software has been revised. New versions of the storage software are being tested with the Europeans. This is ciritcal to the LHC operations. The OSG software is working on SciDAC and CDIGS. The GRAM interface will be implemented over the next six months.

# **Report on International Science Cooperation**

The National Science Board published a report on international science cooperation. It is available at: www.nsf.gov/nsb in the first highlighted bullet.

## **Shibboleth**

Ken Klingenstein provided a briefing on Shibboleth. It is available at:  $\frac{\texttt{http://middleware.internet2.edu/co/}}{(\texttt{dated November})} - \texttt{the first linked presentation}$ 

Shib 1.3 is widely deployed. Open SAML 2.0 libraries are widely used. Shib 2.0 is now in beta release. NSF, Internet2, JISC, SWITCH, Google, and MicroSoft have provided funding. There are 12 million users in Europe and Asia and an additional 6 million in the US.

Federations are occurring broadly. Almost all corporate federations are bilateral; almost all in the research world are multilateral. They provide leverage of enterprise credentials. Federations

are learning to peer. In-Common is a US Research and engineering Federation. It addresses legal, LOA, shared attributes, and vusiness propositions. Federating software is Shib 1.3 and it provides levels of authentication. Efforts at EAuthentication have faltered.

A Prague meeting was held on Inter-Federation among 15-20 international R&E Federations.

Collaboration tools are proliferating offering users a wealth oif possibilities. Comanage is a collaboration management platofrom supported by the NSF and is being developed with the Internet2 community. It uses Shibboleth, Grouper, and Signet.

AI: The next MAGIC meeting will include a report from Don Middleton AI: Kevin Thompson will give a report on the CyberInfrastrucutre awards at the next MAGIC meeting

# **Next MAGIC Meetings**

October 3, 2:00-4:00, NSF, Room 1150 November 7, 2:00-4:00, NSF, Room 1150